

January 22, 2013

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Northwest Regional Office
Washington State Department of Ecology

Randel Perry
U.S. Army Corps of Engineers
Regulatory Branch
Northwest Field Office

Tyler Schroeder
Planning and Development Services
Whatcom County

RE: Proposed Gateway Pacific Terminal/Custer Spur Environmental Impact Statement Comments

Dear Ms. Kelly, Mr. Perry, and Mr. Schroeder:

I am writing concerning the Environmental Impact Statement (EIS) for the proposed Gateway Pacific Terminal (GPT)/Custer Spur, which if approved would result in the construction and operation of the Gateway Pacific Terminal and modification of associated rail facilities at Cherry Point in Bellingham, Washington. These written comments supplement those provided at the Seattle hearing on 12/13/2012.¹

I was stunned to learn of the plans to export up to 54 million metric tons of dry bulk commodities through this proposed facility, most of which (48 million metric tons, or 89%) is slated for export of Powder River Basin coal.² This amounts to an ~35% increase in the estimated 2012 exports of U.S. coal (a record amount of exports for the U.S.). If the >100 million metric tons of coal proposed for export through the Pacific Northwest occurs, this would amount to an ~73% increase in the estimated 2012 U.S. coal exports.³ If approved, coal would travel from a state I used to call home through lands I remember fondly from summer road trips to export terminals in or near cities I and my family have long called home.⁴ I currently live in Seattle, where the nine or more trains per day projected to run through the city would disrupt my recreation along Seattle's waterfront bike paths, increase my commute times around the city, and increase local air pollution and associated health risks due to the diesel exhaust, coal dust, noise, and other pollutants from the trains. As a research associate in climate change adaptation and wildlife impacts, as well as a concerned citizen who depends on natural, cultural, and economic resources that would be affected directly by this project, I respectfully request you consider my comments herein in your preparation of an EIS. I also request these comments be added to the public record.

SCOPE OF THE EIS

The EIS process requires that the potential direct, indirect, and cumulative impacts resulting from this proposal be identified and analyzed. The proposed GPT/Custer Spur is one of five coal export facilities in Washington and Oregon proposed for construction or modification by mid-century;⁵ existing facilities in

British Columbia already export coal. Most of the proposals either specifically identify the Powder River Basin as the source of coal or refer to low-sulfur intermountain or sub-bituminous coal, which most likely means Powder River Basin coal.⁶ Further, the Tongue River Railroad Company's (TRRC) proposal for construction of the Tongue River Railroad states the transport of coal from proposed mine sites in Rosebud and Powder River Counties, Montana is the principal purpose of the construction and operation of TRRC's proposed rail line.⁷ And finally, the proposed Otter Creek Mine is also intended to ship Powder River Basin coal to Asian markets.⁸

It is clear all of these proposals are linked – the Powder River Basin coal can only be exported if there are mines in Montana and Wyoming, rail lines traversing the Intermountain West and Pacific Northwest, and Pacific Northwest export facilities. Therefore, the proper scope of the GPT/Custer Spur EIS includes the current and proposed mine sites (e.g., Otter Creek Mine), the proposed Tongue River Railroad, the other transportation routes to the current and proposed export terminals, and the export terminals (such as the proposed GPT) themselves. Since the primary purpose of exporting coal is to burn it, the scope of the proposed GPT/Custer Spur EIS should also include the impacts that would result should the coal be exported and burned. Finally, since these impacts cross state lines and affect multiple states, collaboration among federal, state, tribal, and local entities will be needed to conduct a comprehensive review.

AFFECTED RESOURCES AND ADVERSE IMPACTS

I would like to highlight three types of impacts that are of particular importance for fish, wildlife, and natural systems, and for our ability to pursue viable energy alternatives. I make these statements based on my graduate education in environmental policy and two years experience working as a research associate on climate change adaptation, where I focus on impacts and adaptation for ecosystems, habitats, and species.

1. Impacts to Fish, Wildlife, and Their Habitats

The impacts on fish, wildlife, and habitats from these proposed projects will not be limited to one export facility in Bellingham, WA or one rail line in Montana – we need an area-wide EIS that includes impacts to mule deer, antelope, and sage grouse in Montana and Wyoming, salmon, orca, and herring in the Pacific Northwest, and the critical, valued species and habitats in between. The EIS should capture not just the standard economic and environmental costs of the proposed actions, but the externalities that are so often missing from these assessments. Specific questions that should be answered in the EIS include:

- For threatened and endangered species, the habitats they depend upon, and species and habitats of conservation concern or cultural value, what is the impact from the current and proposed mine sites and vicinity, all along the current and proposed rail lines to the proposed GPT/Custer Spur and other export facilities?
- What critical habitat, wilderness areas, and other protected lands will the current and proposed rail lines pass through, and the mines and export facilities be in or near? What is the impact on these lands and areas?
- What is the proposal to alleviate or mitigate all of these impacts?

- How will the effectiveness of actions to alleviate or mitigate these impacts be measured? In other words, what will success look like?

2. Impacts Related Specifically to Climate Change Effects on Natural Systems

It is imperative to understand the climate change impacts to natural systems as a result of burning the coal proposed for export in the Pacific Northwest via mines in the Powder River Basin and transportation routes through the western U.S. The EIS should capture not just the standard economic and environmental costs of the proposed actions, but the externalities that are so often missing from these assessments. Specific questions to answer in the EIS include:

- What are the projected climate change impacts on fish, wildlife, plants, and the habitats and ecosystems they depend upon? Impacts to study include: (1) changes in hydrology, water quality (contaminants, hypoxia, eutrophication, etc), sea level rise, coastal storm surge, erosion, ocean acidification, and air and water temperature; (2) associated changes in nutrient cycling, ecosystem productivity, soil regimes, growing season, freeze and thaw patterns, food web dynamics, phenology, development, community composition, and competition; (3) resulting habitat loss, degradation, and/or transition, altered interaction with invasive and non-native species, altered fire and other disturbance regimes, shifts in species range and distribution, and the possibility of novel assemblages of habitats and species as species shift their range, phenological relationships change or are disrupted, and interactions with invasive and non-native species are altered.
- How will these projected impacts affect coastal communities, commercial, recreational, and subsistence fishers, hunters and gatherers, and others who depend on these resources for health, livelihood, or recreation?
- What is the plan to alleviate, mitigate, and adapt to these impacts, and how will the effectiveness of actions be measured?

3. Impacts on the Ability to Pursue Viable Energy Alternatives

The proposals to increase the mining, transport, and export of coal undercut all our progress on climate change. The combined carbon dioxide (CO₂) emissions from coal shipped and presumably burned from Longview and Cherry Point in Washington State would equal approximately 160% of Washington's total emissions in 2007.⁹ It will be critical to understand the tradeoffs inherent in pursuing coal export in lieu of alternative energies such as renewable and clean energies. Key questions to answer in the EIS are:

- What is the opportunity cost to federal, state, local, and tribal government for supporting the increased mining, transport, and export of coal instead of dedicating time, energy, and money to pursue renewable and clean energy alternatives? This includes short- and long-term costs associated with infrastructure, transportation, energy generation and transport, the health and wellbeing of workers in these industries, and the loss of the ability to work on other problems.
- For the proposed mining, transport, and export of coal, what is the projected return on investment (ROI) for the communities and ecosystems outlined in #1 and #2 (see above)? How does this compare to the ROI for pursuing renewable and clean energy alternatives instead? Calculation of ROI includes economic, social, cultural, and environmental returns.

ALTERNATIVES

I see two reasonable alternatives to consider in lieu of the proposed terminal and rail modifications at Cherry Point, and the overall mining, transport, and export of coal from the Powder River Basin through Pacific Northwest ports:

- *No Action.* Do not pursue construction and operation of GPT or the associated rail modifications.
- *Export Other, More Viable and Less Detrimental Products.* Construct the GPT and other facilities to export more viable and less detrimental products at a scale that will not adversely impact the environment and human communities. The U.S. needs to export more and import less to close our trade deficit and support our economy. Our exports should position us to lead responsibly well into the future. Instead of coal, consider the export of clean and renewable energy technologies that will help the world move toward a sustainable energy economy. Consider the export of U.S.-made hybrid and electric vehicles to international markets. Consider the export of U.S. goods that help protect or clean up the environment while supporting healthy, safe human communities.

AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

While my strongly preferred alternative is to deny applications associated with the mining, transport, and export of U.S. coal, a range of avoidance, minimization, and mitigation measures should be implemented in the event the proposed GPT/Custer Spur or other proposals move forward. At a minimum, these measures should:

- Reduce or eliminate the release of coal dust into communities and the environment by, at a minimum, covering coal train cars, ventilating and capturing ventilated dust at the facility (including fire prevention measures for this coal, which is highly combustible), and installing wind and water barriers to prevent the entry of coal dust into all lands and water.
- Retrofit, update, or acquire trains to achieve the highest available standards for fuel efficiency, noise reduction, and minimizing diesel exhaust and the pollutants and chemicals found in diesel exhaust.
- Retrofit, update, or acquire loading equipment and transport ships to achieve the highest available standards for safety, noise reduction, spill prevention, and spill response. This includes coal, fuel, and other harmful substances.
- Prohibit coal mining and export where there are endangered species, species of concern, or existing or proposed critical habitat. This includes species and habitats that may reasonably be expected to acquire a protected status as the result of mining operations, export facility operations, or climate change impacts associated with burning the exported coal.
- Prohibit coal mining, transport, and export where there are natural and cultural heritage sites such as burial grounds, ceremonial grounds, traditional fishing, hunting and gathering areas, and other similar locations.

Many of these measures are described by the Bellingham City Council in their Technical Supplement submitted on January 14, 2013 (RE: City of Bellingham's Second Set of Scoping Comments on the Gateway Pacific Terminal). I support and agree with those measures.

CONCLUSION

I would like to express my support for and agreement with the excellent comments made by the Washington State Department of Ecology, submitted to you by Director Ted Sturdevant on January 4, 2013. I would like to echo Mr. Sturdevant's point regarding the Council on Environmental Quality's 1997 guidance for considering cumulative effects under the National Environmental Policy Act, which states: "The range of actions that must be considered includes not only the project proposal but all connected and similar actions that could contribute to cumulative effects."¹⁰ It is imperative the proposed GPT/Custer Spur EIS include the direct, indirect, and cumulative impacts of the proposed facility and rail modifications, which include current and potential impacts at the Otter Creek Mine, other current and proposed mining sites, along all current and proposed transportation routes, at the Gateway Pacific Terminal, at all other current and proposed export facilities, and as a result of burning the coal.

In closing, I would like to note I am not against energy development per se, but I must listen and respond when the sum total of my education, experience, and conscience tell me something is not right. Everything I have learned on this topic leads me to conclude these proposals would benefit very few people at the expense of very many people and wildlife. At a time when there are viable energy alternatives to pursue that have the potential to benefit many people and conserve wildlife, we have an obvious opportunity and an ethical responsibility to pursue those alternatives. It is my sincere hope my scoping comments assist those responsible for conducting the GPT/Custer Spur EIS and better enable a comprehensive identification, analysis, and consideration of potential direct, indirect, and cumulative impacts associated with the proposal.

Sincerely,

Patricia Tillmann



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Research Associate, National Wildlife Federation

Master of Public Policy and Administration, Specialization in Environmental and Science Policy

Bachelor of Science in Chemistry, Certified by the American Chemical Society

¹ I was speaker #31 and spoke in the same room as Seattle Mayor Mike McGinn and the Montana ranchers.

² The projected export of 48 million metric tons of coal by 2026 would be more than double what is currently exported from the largest terminal in North America, Westshore Terminals in British Columbia. On their homepage, they state the Roberts Bank coal export terminal is "Canada's No. 1 export coal facility, it shipped a record 27.3 million tons in 2011, easily surpassing the combined total coal exports of all other Canadian facilities" (<http://www.westshore.com/>, accessed January 18, 2013). For more information on why the Powder River Basin is the expected source of coal, see the section Scope of the EIS and endnote 6.

³ 48 million metric tons of coal is equivalent to an ~35% increase in the estimated coal exports for 2012, which were already a record at 136.7 million metric tons (<http://www.eia.gov/forecasts/steo/report/coal.cfm>, accessed January 18, 2013. *Note: there are ~0.90 short tons in one metric ton*). The proposed facility at Longview would have a "nominal ship loading capacity of 44 million metric tons per year"

(<http://www.nws.usace.army.mil/Media/NewsReleases/tabid/2408/Article/2330/army-corps-of-engineers-to-require-eis-for-millennium-bulk-export-terminal-prop.aspx>, accessed December 21, 2012). The Morrow Pacific Project website states: “When the project begins operation, Ambre anticipates shipping 3.5 million metric tons of coal per year to trade allies such as Japan, South Korea and Taiwan. The overall capacity of the Morrow Pacific project is 8 million metric tons per year” (<http://morrowpacific.com/the-project>, accessed January 18, 2013). Together, these three facilities would export up to 100 million metric tons of coal per year ($48+44+3.5 = 95.5$, $48+44+8 = 100$). Export facilities in British Columbia and proposed facilities elsewhere in the Pacific Northwest would increase the annual export.

⁴ These include Olympia, Seattle, Bellingham, and Vancouver. They also include communities in which I spent time as a child (Bonney Lake, Orting), where my grandparents and mother lived (Auburn, Sumner), and already-disadvantaged communities to which I have a personal connection (Chehalis, Rainier).

⁵ See, for example, the map at <http://www.powerpastcoal.org/wp-content/uploads/2011/12/BeyondCoalExports-NorthwestMap-2.pdf> (accessed January 18, 2013). Note that the Grays Harbor terminal is no longer being proposed. More information on the proposed export facilities is included in other endnotes.

⁶ For the Gateway Pacific Terminal at Cherry Point, see <http://www.prnewswire.com/news-releases/peabody-energy-and-ssa-marine-enter-into-long-term-agreement-for-powder-river-basin-coal-exports-117106678.html> (accessed January 11, 2013). For Westshore Terminals in British Columbia, see <http://www.westshore.com/milestones.html> (accessed January 11, 2013). For the Morrow Pacific Project in Oregon, see <http://morrowpacific.com/> (accessed January 11, 2013).

⁷ This information is available in Federal Register notices associated with the Tongue River Railroad Company’s application with the Surface Transportation Board pursuant to 49 U.S.C. 10901 (Authorizing construction and operation of railroad lines, <https://www.federalregister.gov/articles/2012/10/22/2012-25944/tongue-river-railroad-company-inc-rail-construction-and-operation-in-custer-powder-river-and-rosebud>, accessed January 18, 2013) and supplemental application for a Board license to construct and operate the rail line in southeast Montana (<https://www.federalregister.gov/articles/2013/01/09/2013-00242/tongue-river-railroad-company-inc-rail-construction-and-operation-in-custer-powder-river-and-rosebud>, accessed January 18, 2013).

⁸ See, for example, a news release from Arch Coal reporting on full year 2009 results (<http://investor.archcoal.com/phoenix.zhtml?c=107109&p=irol-newsarticle&ID=1380669>, accessed January 18, 2013).

⁹ Washington State’s emissions in 2007 (the last year for which data is fully available) were 104.0 million metric tons of CO₂ equivalents (see Table 2 in Washington Department of Ecology’s Greenhouse Gas Emissions Inventory: 1990-2008, <https://fortress.wa.gov/ecy/publications/publications/1002046.pdf>, accessed January 11, 2013). 92 million metric tons of coal is proposed for export from Longview and Cherry Point, which is equivalent to 170 million metric tons of CO₂ per year. Therefore, $170 \text{ million metric tons} / 104.0 \text{ million metric tons} = 1.63$, or approximately 160%. *Notes to aid replication of calculation: The proposal for Cherry Point lists 48 million metric tons of its capacity is intended for use in coal export (see Table 4-2 in Pacific International Terminals’ Project Information Document: Gateway Pacific Terminal, <http://www.coaltrainfacts.com/docs/PID-comprehensive.pdf>, accessed December 21, 2012). The proposal for Longview lists “nominal ship loading capacity of 44 million metric tons per year” (see U.S. Army Corps of Engineers article, <http://www.nws.usace.army.mil/Media/NewsReleases/tabid/2408/Article/2330/army-corps-of-engineers-to-require-eis-for-millennium-bulk-export-terminal-prop.aspx>, accessed December 21, 2012). The average approximate heating value of Powder River Basin coal is 8,700 BTU per pound (see Clyde Bergmann, Inc., PRB Coal Properties, <http://www.cba-ssd.com/Applications/knowledgeBase/PRBcoal/PRBcoalProperty.htm>, accessed December 21, 2012). Every 1 million BTU produces 212.7 pounds of CO₂ (see U.S. Energy Information Administration, Carbon Dioxide Emission Factors for Coal, scroll to section on Wyoming subbituminous coal at http://www.eia.gov/coal/production/quarterly/co2_article/co2.html, accessed December 21, 2012).*

¹⁰ Council on Environmental Quality (CEQ). Considering Cumulative Effects Under the National Environmental Policy Act. January 1997 (see p. 1). Available at http://energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-ConsidCumulEffects.pdf (accessed January 11, 2013).